DD/S&T 3714-68

25 September 1968

MEMORANDUM FOR: 25X1A [redacted] TSD
, ORD

SUBJECT : [redacted] 25X1A

1. This material I discussed with you a couple of days ago has obviously been submitted to the Air Force as a proposal, but there may be particular Agency problems against which the techniques would be of interest. In any event, they provide a comparison with some work in this field which we already have underway. Appendix A discusses some approaches to calculating optimal solutions in direction finding which may have applications other than those proposed.

25X1A 2. [redacted] was a member of the class which I attended at UCLA this summer, and my response to his letter is attached.

25X1A /S/
[redacted]
Special Assistant to the
DD/S&T

25X1A cc: [redacted] w/ [redacted] letter. 25X1A

DD/S&T# 3631-68

[redacted]

25X1A [redacted]

30 July 1968

25X1A [redacted]

Special Assistant to the Deputy Director
for Science and Technology
Central Intelligence Agency
Washington, D. C. 20505

Dear Ray:

The enclosed information may be of interest to you and your colleagues. Field tests conducted by [redacted] during a company-funded program have indicated that stress-wave propagations caused by personnel and vehicular movements can be used as the triggering element to activate a perimeter alarm system. Use of these stress waves in conjunction with a stress-wave analysis technique enables real-time detection and location of intrusive activities. 25X1A

The enclosed report contains data on tests conducted to determine the suitability of aerospace technology for use in SEA problems. [redacted] has developed a stress-wave analysis technique (SWAT) to triangulate in real time, flaw or grain failures occurring during hydrostatic testing of pressure vessels. The data readout for this equipment automatically records the location of the flaw and teletypes the coordinates of the energy release source. The program described in the attached report is designed to adapt the SWAT concepts to perimeter-defense problems, to demonstrate the benefits to be derived from real-time surveillance of fixed locations, such as airfields, loading and docking zones, and major storage areas. 25X1A

25X1A If you desire any further information or wish to discuss our research with [redacted] technical personnel, I will be happy to make the arrangements.

Very truly yours,

[redacted] 25X1A

Enclosure: (1) Anti-Intrusion Perimeter Defense System, Proposal [redacted] 681503 dtd 9 July 1968 25X1A

(2) Data Processing for Locating Acoustic Disturbances, Progress Report, Appendix A, dtd 9 July 1968

25X1A

CENTRAL INTELLIGENCE AGENCY
WASHINGTON, D.C. 20505

25 September 1968

25X1A [redacted]

Dear Bill:

Thank you very much for sending a copy of the [redacted] 25X1A proposal for an Anti-Intrusion Perimeter Defense System. I have passed the material on to the managers who I feel would most likely have an interest in this type of system. If they have any particular questions they will contact you directly.

Thanks very much for your interest. If you have any free time on your next Washington visit and can drop by, please give me a call.

Regards,

25X1A [redacted]

Special Assistant to the
Deputy Director for Science and Technology